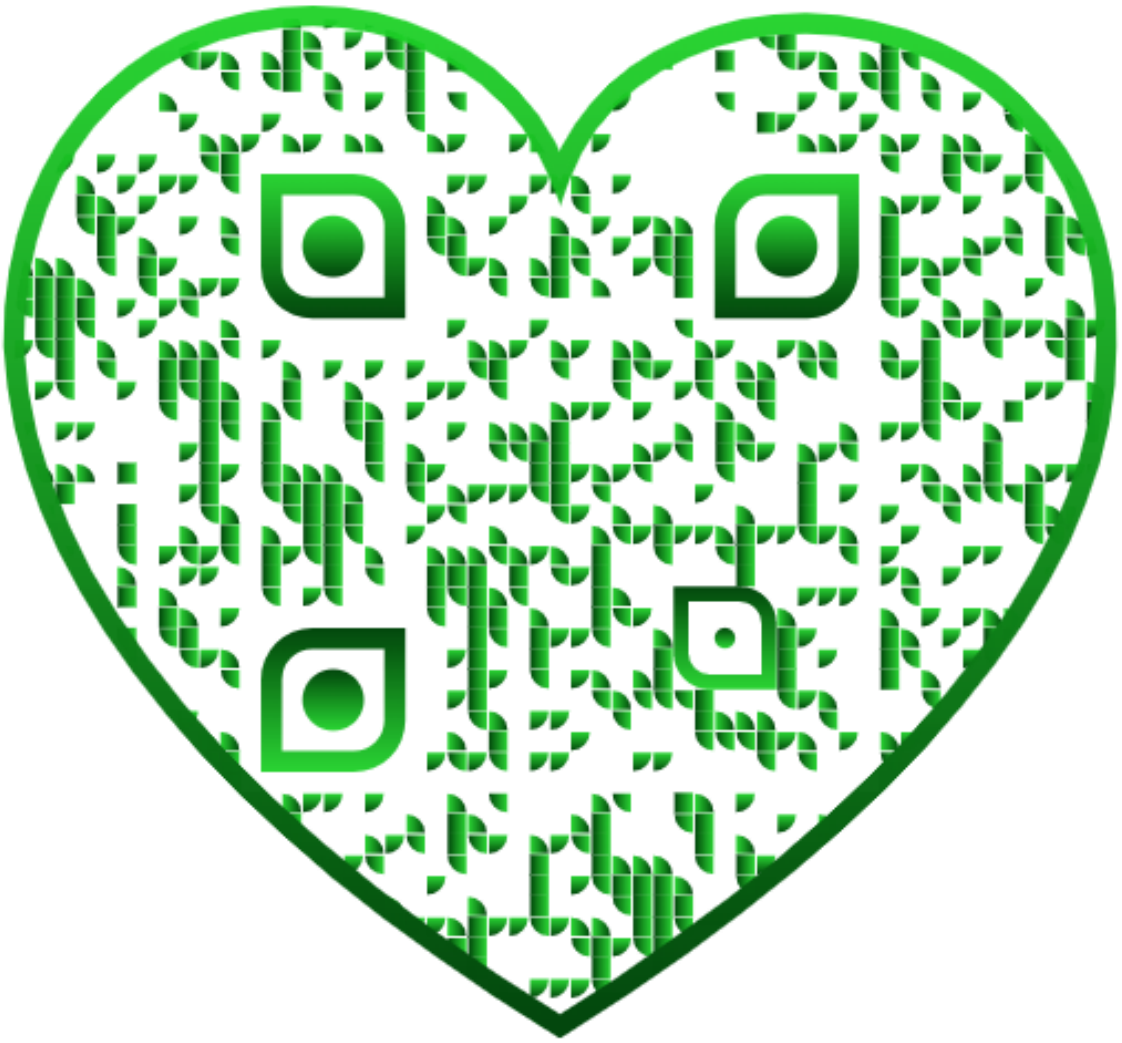
Gravity & Antigravity To The Point

Audrey E. Randles



Gravity & Antigravity

To The Point

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Preface

This book introduces the explanation of the fundamental issues, which underlie the Newton's Law of Universal Gravitation and Antigravity, providing you with some details associated with the gravitational and anti-gravitational processes in micro- and macro-world.

The modern interpretations, multiple theorems and equations describe different hypothetical and computer simulated physical properties of the Universe. Questions associated with the Universe structure, Gravity and Antigravity, Time, Space, Mass, Energy and gravitational time dilation within Black Holes remain. Some scientists offer the hypotheses of Time non-existence.

Different models of the early Universe have not provided us with the answer to the main questions about the Universe structure.

Is the Universe created from nothing? Is it infinite? Is it empty? How was the Universe formed? Where did the matter come from to become the uniform mass or any other dense medium? Where did the initial density perturbations come from to grow under their own Gravity? Do we live in a Black Hole?

The theories involving singularities, such as a gravitational singularity or Space-Time singularity, do not provide us with the satisfactory answers.

The theories of singularity try to put the body of the existing Universe into the point, or a singularity with the utmost infinite mass, and explain its birth in terms of a Big Bang as a necessary concept for the beginning of the Universe. Let us compare the birth of our Universe with a child birth. You do not need to suppress the mass of the adult person, his life history and life experience into one point to make him fit into the mother's womb to explain a natural process of a child birth and development.

Similarly, you do not need to suppress the body of the existing Universe, its mass and history into a singularity and explain the birth of the Universe as a result of a Big Bang. The Big Bang Theory has two weak points - the beginning of the Universe existence from nothing and the end of the Universe existence to nothing. The Law of the Energy Conservation is violated. Nothing is coming from nothing and going to nothing.

The theory of singularity is still left with the same problem - the start of the singularity. The reverse of Time in the frame of the theory of singularity will not lead us to the correct decisions associated with Gravity and Antigravity.

The theories of singularity and Big Bang reflect limitations of the modern mathematics.
There is no need for the Universe beginning from a Big Bang and Universe final collapse. Space-Time is complete and harmonic and characteristics of the Universe are different in different modalities of Space-Time.
This book discusses the questions mentioned above hence describes the Universe in our dynamic world.
We describe the structure of our multimodal Universe, its rotation, Space-Time and energy relationship, characteristics of different regions of our Universe, their Space-Time, Information and Energy structure and dynamics.
Enjoy your reading.

Yours sincerely,
Audrey E. Randles

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Chapter 1 Energy pictures Space and Time

The Theory of Matrix is applicable to every existing object and every system of the objects, including visually “empty” spaces, subatomic particles and holes, quanta, humans, Black Holes, other objects and systems existing in the Meta-Universe. The Theory of Matrix is applicable to the Universe and its Matrix.

The Matrix reflects the current human understanding of energy as the forms of energy, actually acting in our dynamic world as radiation, mass and kinetic energy, and latent form of potential energy.

In accordance with the Theory of Matrix energy is a quality of information and information is a quality of energy. Energy exists in a form fixed by information, and information has a form fixed by energy. The density of information is proportional to the density of energy, associated with the information. Information and energy are complementary and balanced in the Matrix. Information takes different forms and exists in the latent, or potential, and actual forms along with energy.

According to Albert Einstein “...the ponderable masses will be the determining factor in producing the field, or, according to the fundamental result of the special theory of relativity, the energy density...” [Albert Einstein, A Brief Outline of the Development of the Theory of Relativity (1921)].

In accordance with the Theory of Matrix, the Matrix is not the field but the structure. The ponderable masses are the determining factor in producing the energy density, information density and multimodal Space-Time and Info-Energy structures of their Matrixes.

Energy pictures Space and Time

Every existing object and every system of the objects with the qualities of volume, mass, energy, and time of existence is embedded in the Matrix. The Matrixes for the objects and systems of limited mass and energy are limited in Space and Time.

The Matrix, being a property of an object or a system, does not exist without

the embedded object/system. The object or the system, embedded at the centre of Matrix, is a source of the total Space-Time and Info-Energy of the Matrix and, nevertheless, the Matrix is a self-organizing system. Matrixes are generated as an outcome of the binary operation of two Matrixes or by any of the following: reflection, self-duplication, binary fission, self-multiplication, and incorporation, while maintaining anisotropy.

The Matrix is formed by the 2-dimensional grid. It looks like a hologram. The 2-dimensional representations of background radiation, including those currently known as electromagnetic radiation, cosmic background radiation, such as the cosmic microwave background radiation, light, et cetera, support the latent, or potential, Info-Energy structure of the Matrix grid. We can compare this with a human genome that is the complete set of genetic information for a newborn child.

Two types of the Matrixes have been identified - the Time Rising Matrix (TRM) and Space Rising Matrix (SRM). This book describes the Space-Time and energy structure of the Universe, its SRM and certain aspects of Gravity and Antigravity. You can see my book “Gravity and Rotation” for details associated with the structure of the high energy radiating objects and systems, associated gravitational processes and structure of the TRM.

Chapter 2 Space-Time Structure

The Theory of Matrix introduces a new understanding of a multimodal world with respect to the multidimensional Time. Every existing single object and every system of the objects, including visually “empty” spaces, subatomic particles and holes, quanta, humans, Black Holes, other objects and systems and our Universe, are the multimodal objects.

The multimodal objects carry the properties of different Space-Time modalities, reflected in the structure of their Matrixes involving a coexistence of different dimensions and different modalities of Space-Time. The characteristics of the Universe are different in different modalities of Space-Time.

The Matrix reflects the human momentary perception of Time as a point "now", associated with the period of Time now occurring, and current human understanding of two separate imperceptible periods of Time, associated with the past and future.

The meaning of Time

The human perception of time as a time-point, the current “Now”, is the main boundary we operate in. Consciously we operate “Now”, around a “0” time-point.

If you look inside your conscious operating system, you notice, that it is always “Now” for you. You think “now”, at the point between the past and future. And “now” you are remembering the past or thinking about the future. Our conscious “I”, the heart of our Individual Core, operates as a “point”, similar to a point in time - a moment. Our momentary perception of Time might be compared with the series of dots we perceive on the line made on one side of the 3-dimensional Time cube of the 3-dimensional world.

The human momentary perception of Time is reflected in the mathematics and other abstract sciences associated with numbers, quantities and space. It is reflected in the abstract concepts, which are built on mathematics and applied to other disciplines, such as physics. Time characteristics in theoretical physics are mainly applicable in the settings of simultaneity and

cause and effect.

Pre-existing Space-Time concepts can be found in the scientific publications by Hendrik Lorentz, Paul Langevin, Hermann Minkowski, Hermann Weyl and Albert Einstein. “...any event is determined in terms of its position in space and time by four coordinates measured in this reference system, three for space and one for time.”

Currently, there are multiple concepts and essays on the nature of Time and Time related issues. Some scientists offer the hypothesis of the time non-existence and state, that "time is equivalent to the space coordinates". They replace time dimensions with "point events" reflecting time. We have to apply a standard clock and simultaneity reflecting our momentary perception of time..

Time is considered as one of four dimensions of the world - the addition to three space dimensions. It is conceptualized as absolute simultaneity of events.

There are multiple Space-Time descriptions of causality. Time is replaced by the relation of cause and effect, the temporal order of cause and effect, bidirectional causation, causal asymmetry, causal loops and backward causation. Some theorists deny that time really passes.

Replacing time dimensions we build the cause and effects lines in our sciences and our lives and we are still unsatisfied with predictions of the future events.

Without knowledge of time we have a chaos.

The mentioned above confirms the importance of time in our lives and our sciences, and our refusal to see the truth is the sublimation and repression of the time related psychological conflict in men.

The Matrix for an object or a system of the objects depicts the multimodal Space-Time, Info-Energy and Mass-Energy structure of the associated object/system and, accordingly, the structure of the Matrix involves a coexistence of different Space-Time modalities.

The Matrix Space-Time

The meaning of time is applicable to the Matrix settings as the past, future and present time of an object or a system, existing “here” and “now”, in the Space of the period of Time now occurring.

A “0” Space-Time point, or “a space-time-null-point”, is a point “here” and “now”.

“0” Space-Time point

The point “here” and “now” as a “0” point was mentioned in Special Relativity in association with the mathematical Model of the Light Cone.

“Let us call any world-point 0 as a space-time-null-point.” [Minkowski Hermann, “Space and Time” (1920)]

“A world-point is a "here-now". [Weyl Hermann, “The Discussion concerning the Theory of relativity at the Meeting of Natural Scientists” (1920)]

The “0” Space-Time point is a centre of the Matrix. It is the point of the Matrix symmetry. The Matrix Space-Time, Mass-Energy and Info-Energy are symmetrical via the “0” Space-Time point, if the Matrix is balanced.

The “0” Space-Time point of the Matrix may be represented as a coexistence of the “0" time-point and “0” space-point that are complementary, building the Time system and Space system in the opposite direction. Please see my book “Space and Time” for details.

A “0” time-point reflects a time component of the “0” Space-Time point at the centre of the Matrix.

Matrix Spaces of Time

Space-Time is represented in the Space Rising Matrix (SRM) of the Universe as the Space of the Current Time, associated with the period of time now occurring, Space of the Progressive Time, associated with the future of the Universe, and Space of the Regressive Time, associated with the past of the

Universe.

Space is associated with the Actuality and Time is associated with the Latency, or Potentiality.

The SRM is a multimodal structure, and the Universe characteristics are different in different modalities of Space-Time.

The Space of the Current Time, associated with the period of time now occurring, is equal to the volume of the Universe embedded at the centre of the Matrix. The volume of the Universe is bounded by the Matrix grid around a “0” time-point at the centre of the Matrix.

The Space of the Current Time is connected with the Matrix Spaces of the Progressive and Regressive Time. The Matrix Space of the Progressive Time is the space of the Matrix cone associated with the future of the Universe. The Space of the Regressive Time is the space of the Matrix cone associated with the past of the Universe.

The total Space-Time of the Matrix is equal to the total Space-Time, which our Universe possesses for the total period of its existence, including its past, present and future.

The Universe is a source of the total Space-Time and Info-Energy of its Matrix. The Matrix for our Universe is a Space Rising Matrix (SRM). Our Universe is expending in space. It is a young non-radiating Universe. The Matrix for the Universe has the positive curvature. It is different from the Matrix for the flash of light, or the Light Cone of Special Relativity, and demonstrates different Mass-Energy and Space-Time characteristics.

It would be nice and easy to represent the structure of the Universe as a temporal field, which is built by the two poles of the Universe existence - “the start” and “the end” of the existence - a temporal field, which projects the energy lines directed by the Arrow of Time from the past to the future, similar to the Light Cone of Special Relativity.

But there are no forces, influences, or any other dynamics in 2-dimensional Space-Time associated with the past and future of the Universe.

The Matrix Spaces of the Progressive and Regressive Time look like a hologram. They are immobile, unchanging, inaccessible, appear empty and connected with the one-dimensional Continuum.

The one-dimensional Space-Time Continuum is the unified one quality Space-Time as the infinite duration. The meaning of aether as an empty space or aether as a substance with the properties of a medium is not applicable to the Continuum. There is no space, but the infinity, which is perceived by men as undifferentiated Space-Time or emptiness.

We cannot perceive any movement and changes of the Matrix 1-dimensional and 2-dimensional Space-Time associated with the Continuum and Matrix cones. The 1-dimensional and 2-dimensional Space-Time are immobile and unchanging for our perception.

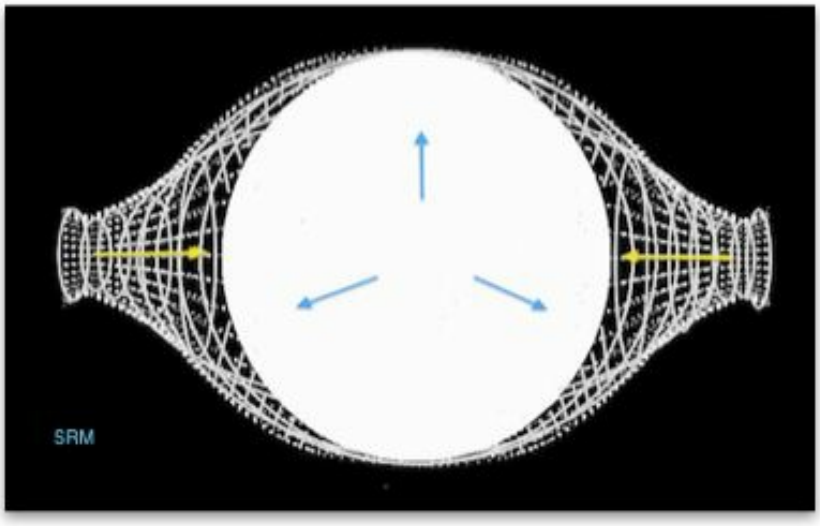
The relative difference in the human mode of perception of Time and Space is built by the limits to the human perception of Time. The relative difference between our perception of Time and Space makes our world dynamic to us.

The Spaces of the Progressive and Regressive Time are symmetrical via a “0” Space-Time point at the centre of the Matrix and via the Matrix axis if the Matrix is balanced. A mirror effect is possible.

The Space-Time Axis

In accordance with the Theory of Special Relativity the Space axis of the Light Cone builds a perpendicular to the Time axis.

In compliance with our investigations of the Matrix and according to the Theory of Matrix the Light Cone is an example of the Matrix for a flash of light. The Space-Time axis (other terms: Matrix axis, Space axis, Time axis) is the only axis of the Matrix.



Space Rising Matrix for the Universe

Strictly speaking, the reproduction of the Matrix grid on the paper is not exact though the form of the Matrix is correct. It is related to the difficulties to reproduce the 2-dimensional structure on the paper. Please take into account that the Matrix grid, forming the Matrix Spaces of Time, is typically a rectangular, regular repeated, with the equal distances, 2-dimensional infinitely thin filament. It is applicable to all forms of Matrixes.

The Matrix is symmetrical via the Space-Time axis if the Matrix is balanced in its Space-Time, Mass-Energy and Info-Energy.

Large spacious non-radiating objects and systems, such as our Universe, demonstrate the Space-Time imbalance. The Arrows of Time are not harmonically balanced in the SRMs of the large spacious non-radiating objects and systems.

The Space-Time Arrow

The Matrix Space-Time Arrow, directed by the Matrix axis, demonstrates a coexistence of the tendency of Time and contra-directed tendency of Space, along with the tendencies of the past and future.

The Time component of the Space-Time Arrow might be represented as the Arrow of the Progressive Time and Arrow of the Regressive Time, which are contra-directed, symmetrical, and balanced in the Matrix.

The hypothesis, giving an opportunity for understanding the coexisting contra-directional tendencies of the Space-Time Arrow, is described in my book “Space and Time”.

The Arrows of Time

The Arrows of the Progressive and Regressive Time are associated with the Spaces of the Progressive and Regressive Time.

The Arrows of Time are directed by the Matrix axis. They are symmetrical if the Matrix is balanced.

The Arrows of Time display some specific characteristics associated with the type of the Matrix.

The direction of the Arrows of Time in the SRMs (Space Rising Matrixes) of the non-radiating objects, such as our Universe, is different from the direction of the Arrows of Time in the Time Rising Matrixes of the radiating objects.

The Arrow of the Progressive and Arrow of the Regressive Time indicate the direction of the Time “flow” in the Matrix Spaces of Time.

The Arrows of Time are pictured as the yellow arrows on the reproduction of the Matrix (see page 8), while the direction of the Space of the Current Time is represented by the blue arrows, situated in accordance with the human perception of the objects and systems as exhibiting three Space dimensions (x, y, and z, or a combination of three directions, which can be chosen from the terms: length, width, height, depth, and breadth).

In the SRM of the Universe the Space of the Progressive Time is a deviation from the Progressive Time with the characteristics of the Time “contra-flow”, and the Arrow of the Progressive Time is directed from the future of the Universe to the “0" time-point at the Matrix centre. The Space of the Regressive Time is a deviation from the Regressive Time with the characteristics of the Time “flow”, and the Arrow of the Regressive Time is directed from the past of the Universe to the “0" time-point at the Matrix centre.

The Matrix Arrows of Time may be reversed that indicates the reverse of the

direction of the Time “flow” in the Matrix Spaces of Time. Accordingly, the Space-Time of the Matrix may be reversed. Space-Time reversibility is determined by the Mass-Energy and Info-Energy resources of the Universe and its Matrix.

The Law of Space-Time reversibility is applicable to other objects and systems existing in the Universe. Space-Time reversibility is determined by the Mass-Energy and Info-Energy resources of the Matrix and its associated object/system.

The direction of the Arrows of Time provides us with an opportunity to detect possible changes of the Space-Time direction and reverse of the energy flow in the Universe and other objects and systems, existing in the Universe, such as the Sun, Black Holes, and our planet. Please see my book “Black Holes” for details, associated with Space-Time reversibility within Black Holes.

Chapter 3 Energy Structure

We mentioned above that energy is a quality of information and information is a quality of energy. Information and energy are complementary and balanced in the Matrix. The density of information is proportional to the density of energy, associated with the information. Information takes different forms and exists in the latent, or potential, and actual forms along with energy.

The Matrix reflects the current human understanding of energy as the forms of energy, actually acting in our dynamic world as radiation, mass and different forms of kinetic energy, and latent form of potential energy.

Energy pictures Space and Time. The mass and energy of the Universe are reflected in the SRM characteristics.

Actual Info-Energy

There is no empty Space in the Universe. The volume of the Universe is bounded by the Matrix grid around the “0” time-point at the centre of the Matrix and filled with the actual Info-Energy, represented in mass, different forms of kinetic energy and other energy representations, actually acting in the volume of the Universe at the present time. The complete actual information is coded and fixed by the total actual energy in the volume of the Universe.

Latent Info-Energy

The latent, or potential, energy of the Universe and associated latent information are represented in the Info-Energy of the Matrix-grid. The Matrix grid, forming the Spaces of Time, is built by the latent, or potential, energy, which is coded and fixed by the latent, or potential, information.

The Matrix 2-dimensional grid depicts the Space-Time and energy structures of the Universe.

The total Info-Energy of the Matrix grid is the total latent, or potential, energy and associated latent information, which the Universe possesses in Space and Time, including its past, present and future.

Albert Einstein writes: “It was found that inertia is not a fundamental property of matter, nor, indeed, an irreducible magnitude, but a property of energy.” [Einstein Albert, A Brief Outline of the Development of the Theory of Relativity (1921)].

The Matrix grid is a regular repeated (with the equal distances), typically rectangular, grid-like 2-dimensional arrangement of the info-energetic net-structure associated with the Universe. It is the infinitely thin filament, forming the Matrix Spaces of Time and containing the Universe latent, or potential, Info-Energy. The 2-dimensional grid forming the Matrix cones is immobile and unchanging for our perception. Our understanding of the Universe characteristics, motion, acceleration, forces is applicable to the Space of the Current Time in centre of the Matrix.

The potential and actual Info-Energy structures counteract and keep a balance in the Matrix, maintaining Space-Time, Info-Energy and Mass-Energy Conservation Laws and Matrix Laws of Symmetry.

According to the theory of General Relativity, energy curves Space-Time [Einstein Albert, Relativity: The Special and General Theory (1916)].

The SRM for the Universe has a form of the Riemannian Manifold with the positive curvature and Riemannian geometry is applicable to the Matrix investigation. The curvature of the Matrix grid depends on the Space-Time, Info-Energy and Mass-Energy properties of the Universe. The curvature of the grid does not depend on how the surface is embedded in 3-dimensional or higher-dimensional spaces. The curvature of the grid does not depend on how the 3-dimensional Space of the Universe is embedded at the centre of the Matrix.

Black pixels, reading zero, correspond to the potential information, fixed by the potential energy of the 2-dimensional grid. They are associated with the timing mechanisms and sweep rates and the address of a pixel corresponds to its Space-Time coordinates.

We suppose that the blocks of information, which are involved in the Actuality or located relatively close to the point “Now” in Time, are situated closer to the centre of the SRM, then other latent information. Hypothetically,

if the blocks of information are associated with the Matrix Space of the Current Time, then they might have a 3-dimensional structure.

The distances along paths on the surface of the SRM and angles are to be measured as the characteristics of the latent, or potential, Info-Energy of the Matrix 2-dimensional grid of the Universe. The notion of the curvature is to be defined in a way that is intrinsic to the manifold.

The Matrix grid, being an external framework and boundary of the Universe embedded at the centre of the SRM, is, simultaneously, an internal framework and Space-Time and Info-Energy skeleton of the Universe in our dynamic world.

Background radiation, including those currently known as electromagnetic radiation, cosmic background radiation, such as the cosmic microwave background radiation, visible light, et cetera, supports the info-energetic grid of the Matrixes for the Universe and every existing object, system of the objects and visually “empty” spaces existing in the Universe.

Any object, which is smaller than the wavelengths, supporting the Info-Energy grid of the object's Matrix, does not exist in Space-Time.

Measurement Systems

It seems reasonable measuring the properties, associated with the centre of the Matrix and characteristics of the Universe, in the accepted units associated with the 3-dimensional Space and current understanding of Time, Energy, and Force.

Different measurement systems must be applied to the currently inaccessible Spaces of the Progressive and Regressive Time and 2-dimensional Info-Energy grid, forming the Matrix Spaces of the Progressive and Regressive Time.

Chapter 4 Matrix Forces

Two opposite vector-forces act in the Space of the Current Time of the Matrix centre.

The Universe latent energy and associated with this energy information of the 2-dimensional grid result in the Matrix grid vector-force of pressure. The Matrix grid vector-force applies pressure (contact force) upon the surface of the Universe embedded at the centre of the Matrix. This force has a direction perpendicular to the surface of contact (normal force). The Matrix grid vector-force of pressure limits the volume of the Universe at the centre of the Matrix. This pressure is a measure of the Universe latent, or potential, Info-Energy, stored in the Matrix grid and related to the latent, or potential, energy density and information density.

The Universe vector-force of resistance influences the Matrix grid. It is a normal force in the opposite direction. The Universe vector-force of resistance applies pressure upon the Matrix 2-dimensional info-energetic grid (contact force). This vector-force is a measure of the Universe actual Info-Energy, reflecting such characteristics of the Universe as its mass, different forms of kinetic energy and other energy representations, acting in the volume of the Universe at the present time.

The Matrix grid vector-force of pressure and object’s vector-force of resistance act in a dynamic balance. The Matrix resultant vector-force equals zero if the Matrix is balanced and symmetrical via the “0” time-point and via the Matrix axis. Every Matrix demonstrates a tendency to obtain and maintain the balance and symmetry.

In a balanced SRM (Space Rising Matrix) the Matrix resultant vector-force reflects the balanced influence of the object's vector-force of resistance, developing the volume of the object in the Matrix Space of the Current Time. The influence of the Universe resultant vector-force reflects a dominant influence of the Universe vector-force of resistance. Our Universe undergoes its natural development by increasing in size.

The balanced SRMs have a balanced tendency to transform Time, associated with the Matrix Spaces of the Progressive and Regressive Time, into the

volume of the object, embedded at the centre of the SRM, along with a tendency to transform the latent, or potential, Info-Energy of the Matrix grid into the object's actual Info-Energy, acting in the volume of the object as mass, kinetic energy and other energy representations, including those known as "black energy", "black matter", et cetera, in our dynamic world. The SRM is balanced if its Space-Time and Info-Energy are balanced.

The large spacious non-radiating objects and systems and some large Space developing objects and systems (such as the systems, building Black Holes, and Space developing non-radiating star clusters and galaxies) and high energy massive radiating objects and systems (such as planets, stars and radiating star clusters and galaxies) demonstrate the Space-Time, Mass-Energy and Info-Energy imbalance and Space-Time, Mass-Energy and Info-Energy transformations to obtain a balance. Equilibrium of the Matrix is reached if Space-Time, Info-Energy and Mass-Energy of the Matrix are balanced and symmetrical via the "0" Space-Time point and via the Space-Time axis.

Chapter 5 Imbalance

The large spacious non-radiating objects and systems, such as our growing Universe, demonstrate the Space-Time, Mass-Energy and Info-Energy imbalance and Space-Time, Mass-Energy and Info-Energy transformations to obtain a balance. The resultant vector-force of the unbalanced Matrix reflects either the dominant influence of the Matrix grid vector-force of pressure or the dominant influence of the object's vector-force of resistance.

The Space-Time imbalance and, accordingly, the associated Info-Energy imbalance are detectable in the second Time dimension and 2-dimensional Time settings.

In our daily life we apply the point-of-time settings, associated with our perception of Time as a point "Now", or the linear time settings in accordance with our understanding of Time as time-line with the time "flow" from the past to the future.

The application of the first Time dimension to the Matrix reflects the typical position of the object/system in its Matrix. It was found experimentally and described in Chapter 2. On the application of the first Time dimension the object is located along the Space-Time axis of the Matrix at the centre of the Matrix.

On the application of the second Time dimension the centre of the object is moved and directed to the Matrix Space of the Regressive Time. It was found experimentally. We suppose, the second Time dimension reflects the functioning of our consciousness on the Past edge of the perceived event while developing a mental conception as a consequence of the process of perception.

On the application of the second Time dimension the surface of the object is moved in the opposite direction and situated facing the Matrix Space of the Progressive Time in accordance with the typical position of an object in the Matrix second Time dimension.

SRM Imbalance

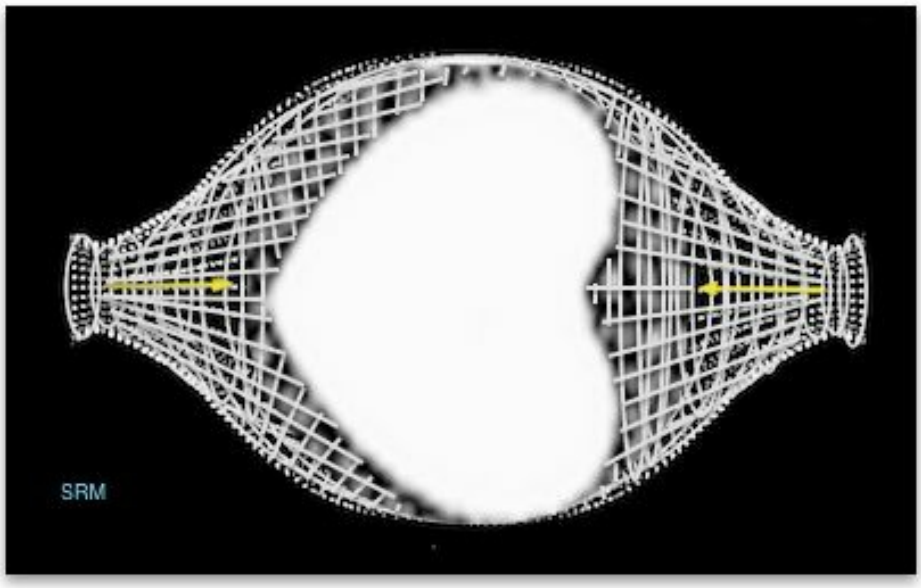
On the application of the second Time dimension and 2-dimensional Time

settings we detect the Space-Time imbalance in the SRM of the Universe. The Arrows of Time are not harmonically balanced.

We detect the excessive Time and Space deficit directed to the centre of the Universe. Time and Space are opposite to each other in the Matrix, and the excessive Time accompanies the Space deficit. This Space-Time imbalance is mainly associated with the centre of the Universe in our dynamic world.

Additionally, we detect the excessive Space and Time deficit directed to the surface of the Universe. This Space-Time imbalance is mainly associated with the periphery of the Universe in our dynamic world.

On the application of the second Time dimension we detect a new centre of the Matrix symmetry, or a “0” time-point at the centre of the Matrix for the Universe in the second Time dimension.



SRM imbalance in the second Time dimension

Please take into account that the Matrix grid, forming the Spaces of Time, is a rectangular, regular repeated, with the equal distances, 2-dimensional infinitely thin filament, though the form of the Matrix is correct.

The different representations of the “0” time-point, existing in 2-dimensional

Time settings and detectable in the Matrix multimodal Space-Time, reflect a coexistence of the qualities of a toroid with the qualities of a globe in the multimodal Matrixes of the large unbalanced spacious non-radiating objects and systems, such as our growing Universe.

This coexistence of the qualities of a toroid with the qualities of a globe in the SRM of the Universe, reflects the Space-Time and Mass-Energy imbalance, specific geometry of the Universe and future development of the toroidal form of the Universe in our dynamic world.

The Space-Time imbalance is often related to the specific Mass-Energy and associated with the geometry of the spacious non-radiating objects. For example, the properties of the Black Holes are related to the Space-Time and Mass-Energy imbalance of the associated objects and systems. Please see my book “Black Holes” for details.

It is not only possible but necessary that our Universe is a part of the system building a giant “Black Hole”. This “Black Hole” is similar to an umbilical cord - a flexible Space-Time cordlike structure attaching our Universe to the “placenta” during gestation. The Universe, being a part of the system with two or more centres, uses a direct Space-Time and Info-Energy transfer between Matrixes of the objects forming the transmitting Black Hole. This Black Hole develops Space and masses of our young and growing, maybe even temporally “inflating”, Universe and consequently supports its growth. We live in the Space-Time, which this Black Hole develops. Therefore our Universe utilizes energy received from the objects and systems, existing within our Universe, along with energy of the radiating and non-radiating objects, existing on the outside - in the multimodal Meta-Universe.

The process of the Universe growth may be reversed in accordance with the Space-Time, Info-Energy and Mass-Energy Conservation Laws and Matrix Laws of Symmetry. The dominant influence of the Matrix grid vector-force of pressure, being the resultant vector-force of the SRM, will reverse the Time and energy flow and conduct the transformation of the Space Rising Matrix (SRM) of the Universe into the Time Rising Matrix (TRM) changing properties of our Universe and, possibly, creating a Supernova in the associated Universe. Please see my book “Black Holes” for details associated

with the Supernova creation.

The Space-Time imbalance and associated influence of the Matrix forces indicate the following properties of our young and growing Universe:

* Gravity, prompted by the centre of the Universe (see Chapter 6);

* Antigravity, prompted by its periphery (see Chapter 7);

* the rotation of the Universe about its Space-Time axis in the Matrix and associated rotation of the Universe about its axis in our dynamic world (see Chapter 9);

* the relative rotation of background radiation, currently known as cosmic background radiation, being simultaneously the external framework of the Universe in the Matrix and internal skeleton of the Universe in our dynamic world, must be detectable (see Chapter 11).

Chapter 6 Gravity In The Universe

Gravity is most intense at the centre of the Universe. Gravitational processes at the centre of the Universe do not contradict, but prompt the local gravitational processes associated with the Space and mass formation in some regions of the Universe. The Space and mass formation is reflected in gravitational acceleration in our dynamic world.

Gravitational acceleration may be detected on the surface of the high energy massive radiating objects and systems, such as some galaxies and star clusters, planets and stars. The law of mass attraction is currently associated with the surface of high energy massive radiating objects and systems, such as our planet. We experience Gravity and gravitational acceleration on the surface of our planet.

Black Holes also demonstrate signs of Gravity. Nasa scientists "can't directly observe black holes with telescopes that detect x-rays, light, or other forms of electromagnetic radiation. We can, however, infer the presence of black holes and study them by detecting their effect on other matter nearby." Please see: http://science.nasa.gov/astrophysics/focus-areas/black-holes/

We suppose that Gravity maybe detected in the central areas of the large spacious and Space developing non-radiating objects and systems, such as some galaxies, star clusters and our growing Universe.

The Space-Time imbalance, such as the excessive Time and deficit of Space, and accompanying Info-Energy and Mass-Energy imbalance, are most intense in the central areas of the Universe. It is associated with the geometry of the Universe, detectable in the Matrix second Time dimension and 2-dimensional Time settings. This imbalance is described in Chapter 5.

Every Matrix demonstrates a tendency to obtain and maintain the balance and symmetry. The Matrix imbalance leads to the Space-Time, Mass-Energy and Info-Energy transformations within the Matrix of the Universe and other spacious non-radiating objects and systems, existing in the Universe. The Space-Time transformations and accompanying Info-Energy and Mass-Energy transformations result in the development of the volume of the Universe and generation of mass, different forms of kinetic energy and other

energy representations, filling up its volume in our dynamic world. This process is reflected in gravitational acceleration.

The fundamental process

The fundamental process, currently understood as Gravity propagation in the body of the Universe, is associated with the transformation of the Space Potentiality - inflated and undetectable Space (Time associated with the 2-dimensional Space of Current Time, or the fundamental 2D Space-Time underlying Space at the present time), into the Matrix Space of the Current Time, detectable in our dynamic world as the volume of the Universe.

This process exists along with the mass formation, or the transformation of the latent, or potential, Info-Energy of the Matrix 2-dimensional grid into the actual Info-Energy of the Universe, filling up its volume and represented in mass, different forms of kinetic energy and other energy representations, acting in the volume of the Universe in our dynamic world. Nothing is coming from Nothing and going to Nothing. Energy and information cannot be lost. Transformations of the information, depicting the forms of energy and mass, proceed along with energy transformations.

Every Matrix demonstrates a tendency to obtain and maintain the Space-Time, Mass-Energy and Info-Energy balance and symmetry. The Matrix resultant vector-force equals zero if the Matrix is balanced and symmetrical via the “0” Space-Time point and via the Matrix axis.

The Matrix for the Universe provides a mechanism for the Space-Time, Info-Energy and Mass-Energy transformations.

The “0” Space-Time point, represented as a coexistence of the “0" time-point and “0” space-point building the Time system and Space system in the opposite direction, is a point of the Space-Time transformations keeping Space and Time in a dynamic balance in accordance with the Space-Time Conservation Law and Matrix Laws of Symmetry. (See Chapter 12) The Arrows of Time reflect the current direction of the Time “flow”.

The resultant vector-force at the centre of the Matrix for the Universe reflects the dominant influence of the Universe vector-force of resistance. The Space-

Time transformation is a function of energy. The influence of the Universe vector-force of resistance provides Space-Time, Info-Energy and Mass-Energy transformations to obtain the Matrix balance. Humans reflect the described transformations as gravitational acceleration.

Background radiation, supporting 2-dimensional structure of the Universe latent Info-Energy and being dynamic in our dynamic world, conduct Space-Time, Info-Energy and Mass-Energy transformations, including those associated with Gravity. Energies of cosmic background radiation and associated information carry the latent (for our perception), or potential, Info-Energy structure of our dynamic world.

Dynamics preserve the Space-Time, Info-Energy and Mass-Energy Conservation Laws and Matrix Laws of Symmetry.

The gravitational horizon

The gravitational horizon is the Matrix info-energetic grid, which is the boundary of the Universe in the Matrix and internal Info-Energy skeleton of the Universe in our dynamic world.

The Matrix grid, built by the 2-dimensional representations of background radiation and supported by the energies of cosmic background radiation, is the leading element in the Space-Time, Info-Energy and Mass-Energy transformations.

In our dynamic world the Space-Time, Info-Energy and Mass-Energy transformations, associated with Gravity, propagate with the speed of light.

The Coefficient of Transformation $[C]^2$

The Coefficient of Transformation $[C]^2$ is applicable to the decisions associated with the Space-Time, Mass-Energy and Info-Energy Transformations and, accordingly, the Gravity and Antigravity propagation.

The Coefficient of Transformation $[C]^2$ is equal to the squared numerical value of the speed of electromagnetic waves propagation in vacuum. It is the coefficient for Space-Time, Mass-Energy and Info-Energy Transformations.

The coefficient [C] is equal to a numerical value of the speed of electromagnetic waves propagation in vacuum. It is a CODATA Fundamental Physical Constant: Value of Speed of light in vacuum (c) is 299 792 458 m s-1 (meter per second).

Transformations associated with Gravity

The Space-Time transformations associated with Gravity develop the volume of the Universe.

The process of Info-Energy transformations is represented in generation of energy, actually acting in our dynamic world, and Mass-formation filling up the Space of the Universe. Transformations of the information, depicting the form of energy, for example, the form of kinetic energy or mass, proceed along with energy transformations.

The Theory of Matrix reflects Space-Time, Info-Energy and Mass-Energy transformations, associated with Gravity, as follow:

A large amount of Time is required in order to get a small amount of Space proportional to Time with the application of the Coefficient of Transformation $[C]^2$ if the Mass-Energy balance of the object is unchanged (energy/mass = $[C]^2$ $length^2/time^2$).

A large amount of Energy is required in order to get a small amount of Mass proportional to Energy with the application of the Coefficient of Transformation $[C]^2$ if the Space-Time balance of the object is unchanged (energy/$[C]^2$ mass = $length^2/time^2$).

A large amount of latent, or potential, Info-Energy (LIE) is required in order to get a small amount of actual Info-Energy (AIE) proportional to LIE with the application of the Coefficient of Transformation $[C]^2$ if the Space-Time balance of the object is unchanged (LIE/$[C]^2$ AIE = $length^2/time^2$).

Dynamics preserve the Space-Time, Info-Energy and Mass-Energy Conservation Laws and Matrix Laws of Symmetry.

Chapter 7 Antigravity In The Universe

Antigravity is most intense on the periphery of the Universe. Anti-gravitational processes on the periphery of the Universe do not contradict, but prompt the local anti-gravitational processes associated with the Space and mass degeneration in some regions of the Universe. The Space and mass degeneration is reflected in anti-gravitational deceleration in our dynamic world.

Anti-gravitational deceleration may be detected on the periphery of the large spacious and Space developing non-radiating objects, such as some galaxies and star clusters.

Black Holes demonstrate signs of Gravity. Please see: http://science.nasa.gov/astrophysics/focus-areas/black-holes/ for details. It is amazing, that we can detect, or theoretically predict, the Black Holes, or the systems of the objects, which demonstrate an imbalance in the second Time dimension facing our dynamic world. The Matrix of the systems, building the Black Holes, is the Space Rising Matrix. Accordingly, anti-gravitational deceleration may be detected on the periphery of these spacious and Space developing non-radiating systems, building the Black Holes.

Moreover, we suppose that Antigravity can be detected within some areas of the high energy massive radiating objects and systems, such as planets, stars, some radiating star cluster and galaxies.

The projection of the different representations of the “0” time-point, existing in the TRMs’ 2-dimensional Time settings (described in the my book “Gravity and Rotation”) into the volume of the high energy radiating objects and systems, such as our planet, might give us a very interesting Space-Time region, located within the projection existing inside our planet and some other radiating objects and systems in our dynamic world. We suppose it is likely, that this region develops Antigravity along with Space and mass degeneration. It is possible, that the elements of “black matter” or “black energy” are not so far from us as we think.

We mentioned above, that the Space-Time imbalance, such as the excessive Space and deficit of Time, and accompanying Info-Energy and Mass-Energy

imbalance, are intense on the periphery of the Universe and related to its geometry detectable in the second Time dimension and 2-dimensional Time settings. This imbalance is reflected in Antigravity.

Every Matrix demonstrates a tendency to obtain and maintain the balance and symmetry. The Matrix imbalance leads to the Space-Time, Mass-Energy and Info-Energy transformations within the Matrixes of the Universe and other large spacious non-radiating objects and systems, existing in the Universe.

The anti-gravitational deceleration is associated with the transformations of Space into Time or Space Potentiality along with the mass reduction, or the Space and mass degeneration, prompted by the Space-Time, Info-Energy and Mass-Energy imbalance.

The fundamental process

The fundamental process, reflected in Antigravity propagation in the body of the Universe, is associated with the transformation of the volume of the Universe, embedded in the Matrix Space of the Current Time and detectable as a volume of the Universe in our dynamic world at the present time, into Time, mostly associated with the development of the Space Potentiality, or inflated and undetectable Space (Time associated with the 2-dimensional Space of Current Time, or the fundamental 2D Space-Time underlying Space at the present time and associated with the latent Info-Energy of the Matrix grid forming the Space of the Current Time), Space degeneration and reduction and qualities of intense anti-gravitational deceleration in our dynamic world.

The Space-Time transformations are a function of energy. The Space-Time transformations, reflected in anti-gravitational deceleration, exist along with the transformations of the actual Info-Energy, which we perceive as masses, different forms of kinetic energy and other energy representations, into the latent, or potential, Info-Energy of the 2-dimensional info-energetic grid and associated with the degeneration and reduction of mass, different forms of kinetic energy and other energy representations, acting in the volume of the Universe in our dynamic world. Nothing is coming from Nothing and going to Nothing. Energy and information cannot be lost. Transformations of the information, depicting the forms of energy and mass, proceed along with

energy transformations.

These transformations, when detected, would be understood as Antigravity propagation in our dynamic world.

Every Matrix demonstrates a tendency to obtain and maintain the Space-Time, Mass-Energy and Info-Energy balance and symmetry. The Matrix for the Universe provides a mechanism for the Space-Time, Info-Energy and Mass-Energy transformations.

The “0” Space-Time point, represented as a coexistence of the “0" time-point and “0” space-point, building the Time system and Space system in the opposite direction, is a point of the Space-Time transformations, keeping Space and Time in a dynamic balance and in accordance with the Space-Time Conservation Law and Matrix Laws of Symmetry. The Arrows of Time reflect the current direction of the Time “flow”.

The Matrix grid is the leading element in the Space-Time, Info-Energy and Mass-Energy transformations associated with Antigravity. The SRM grid vector-force of pressure provides Space-Time, Info-Energy and Mass-Energy transformations to obtain the Matrix balance. Dynamics preserve the Space-Time, Info-Energy and Mass-Energy Conservation Laws and Matrix Laws of Symmetry.

Background radiation, supporting 2-dimensional structure of the Universe latent Info-Energy and being dynamic in our dynamic world, conduct Space-Time, Info-Energy and Mass-Energy transformations, including those associated with Antigravity. This process is represented in the reduction of the volume of the Universe and degeneration of mass, different forms of kinetic energy and other energy representations actually acting in our dynamic world. Energies of cosmic background radiation and associated information carry the latent (for our perception), or potential, Info-Energy structure of our dynamic world.

The process may be reversed in accordance with the Space-Time, Info-Energy and Mass-Energy Conservation Laws and Matrix Laws of Symmetry. If the continuing Space and mass degeneration, prompted by the periphery of the Universe, will dominate the processes of Space and mass generation,

prompted by the central areas of the Universe, it may lead to the future development of the toroidal form of the Universe in 2D Space-Time - the Space Potentiality built by the latent, or potential, Info-Energy (LIE) of the Universe.

The following limitation of the actual Info-Energy resources will reverse the Space Rising Matrix (SRM) of our Universe into the Time Rising Matrix (TRM) and prompt the development of the deflation, gravitational acceleration and generation of Space, mass, different forms of kinetic energy and other energy representations, on the periphery of the Universe and, accordingly, other regions of the Universe in our dynamic world with possible development of the Universe into the high energy massive radiating object/system.

The anti-gravitational horizon

The Universe anti-gravitational horizon is the Matrix 2-dimensional grid, which is the boundary of the Universe at the centre of its multimodal Matrix and internal Info-Energy skeleton of the Universe in our dynamic world. The Matrix grid, built by the 2-dimensional representations of background radiation and supported by the energies of cosmic background radiation, conduct the Space-Time, Info-Energy and Mass-Energy transformations, including those related to Antigravity.

In our dynamic world the Space-Time, Info-Energy and Mass-Energy transformations, including those associated with Antigravity, propagate with the speed of light.

The Coefficient of Transformation $[C]^2$

The Coefficient of Transformation $[C]^2$ is applicable to the decisions associated with the Space-Time, Mass-Energy and Info-Energy Transformations and, accordingly, the Gravity and Antigravity propagation. The Coefficient of Transformation $[C]^2$ is equal to the squared numerical value of the speed of electromagnetic waves propagation in vacuum. It is the coefficient for Space-Time, Mass-Energy and Info-Energy Transformations.

The coefficient [C] is equal to a numerical value of the speed of

electromagnetic waves propagation in vacuum. It is a CODATA Fundamental Physical Constant: Value of Speed of light in vacuum (c) is 299 792 458 m s-1 (meter per second).

Transformations associated with Antigravity

The Space-Time, Mass-Energy and Info-Energy transformations, reflected in anti-gravitational deceleration, are related to the Space and Mass degeneration and reduction in the Universe and some other objects and systems existing in our dynamic world.

The Theory of Matrix reflects Space-Time, Info-Energy and Mass-Energy transformations, associated with Antigravity, as follow:

A small amount of Space is required in order to get a large amount of Time proportional to Space with the application of the Coefficient of Transformation $[C]^2$ if the Mass-Energy balance of the object is unchanged (energy/mass = $[C]^2$ length^2/time^2).

A small amount of Mass is required in order to get a large amount of Energy proportional to Mass with the application of the Coefficient of Transformation $[C]^2$ if the Space-Time balance of the object is unchanged (energy/$[C]^2$ mass = length^2/time^2).

A small amount of actual Info-Energy (AIE) is required in order to get a large amount of latent, or potential, Info-Energy (LIE) proportional to AIE with the application of the Coefficient of Transformation $[C]^2$ if the Space-Time balance of the object is unchanged (LIE/$[C]^2$ AIE = length^2/time^2).

Dynamics preserve the Space-Time, Info-Energy and Mass-Energy Conservation Laws and Matrix Laws of Symmetry.

Gravity at the central areas of the Universe and Antigravity on its periphery do not contradict, but prompt the local gravitational processes building up the spaces and masses of some regions of the Universe along with the local anti-gravitational processes associated with the Space and mass degeneration in the Universe.

Humans experience qualities associated with the intermediate region of the

Universe and local gravitational and anti-gravitational processes, reflecting the Space-Time, Info-Energy and Mass-Energy transformations, must be detectable.

Chapter 8 Equivalence Principle

The Theory of Matrix supports and develops the Equivalence principle described in General Relativity. Equivalence principle of General Relativity states that at any point of Space-Time the effects of a gravitational field cannot be experimentally distinguished from those due to an accelerated frame of reference.

The Theory of Matrix supports the Equivalence principle of General Relativity, viewing the mentioned gravitational field as the specific Space-Time imbalance, such as the excessive Time and deficit of Space that humans perceive as Gravity.

In accordance with the Theory of Matrix the Space-Time imbalance results in Space-Time transformations and associated Info-Energy and Mass-Energy transformations. The Space-Time transformations are a function of energy.

The specific Space-Time imbalance, such as the excessive Time or Space Potentiality and deficit of Space (actual Space), is associated with Gravity. The transformations of Time into Space humans perceive as acceleration and gravitational acceleration. The effects of the specific Space-Time imbalance, such as the excessive Time or Space Potentiality and deficit of Space (actual Space), and associated transformations of Time into Space have the same mechanism in an accelerated frame of reference and acceleration due to Gravity.

The specific Space-Time imbalance, such as the excessive Space and deficit of Time is associated with Antigravity. The transformations of Space into Time or Space Potentiality are associated with deceleration and anti-gravitational deceleration. The effects of the specific Space-Time imbalance, such as the excessive Space and deficit of Time, and the transformations of Space into Time or Space Potentiality have the same mechanism in a decelerated frame of reference and deceleration due to Antigravity.

Chapter 9 Rotation Of The Universe

The rotation of the multimodal spacious unbalanced non-radiating objects and systems, such as our growing Universe, is associated with the specific geometry and rotation of these objects/systems about their Space-Time axis reflected in their rotation in their multimodal Matrixes and our dynamic world.

The cause of the specific geometry of the Universe is the coexistence of the qualities of a toroid along with the qualities of a globe in 2-dimensional Time settings and, accordingly, the development of the toroidal form of the Universe in our dynamic world in the future.

The Matrix Space-Time imbalance along with the associated Info-Energy and Mass-Energy imbalance and specific geometry of the Universe in the 2-dimensional Time settings result in the Matrix grid vector-force applying pressure on the surface of the Universe embedded at the centre of the Matrix with the difference in pressure across the surface.

The Universe vector-force of resistance applies pressure on the Matrix grid within the centre of the Universe, with the difference in pressure across the surface of the contact. This pressure leads to the rotation of the Matrix grid about the Space-Time axis of the Universe in the Matrix and specific rotation about its axis of rotation in our dynamic world with the gradual shift in the orientation of the axis of rotation that must be detectable.

The influence of the Matrix forces leads to the specific rotation of the Universe about the Matrix axis (Space-Time axis) in the Matrix and its axis of rotation in our dynamic world. It impacts on the gradual shift in the orientation of the Universe axis of rotation, or the precession, within Meta-Universe.

The relative rotation of the Matrix grid, being the external framework of the Universe in its SRM and internal Info-Energy skeleton of the Universe in our dynamic world, is reflected in the rotation of background radiation and must be detectable as the rotation of cosmic background radiation, supporting the Matrix of the Universe.

The described characteristics of the Universe, such as its geometry, influence of the Matrix forces, Space-Time, Mass-Energy and Info-Energy imbalance and transformations, direct the specific rotation of the Universe about its Space-Time axis, its associated rotation in our dynamic world and impact on the gradual shift in the orientation of the Universe axis of rotation, or the precession, within Meta-Universe.

Humans experience qualities associated with the intermediate region of the Universe, and the rotation of cosmic background radiation must be detectable.

Chapter 10 Quantum World

Effects, related to the quantum space, quantum time and quantum energy (see more of Planck), are associated with the point of the Matrix symmetry - the "0" Space-Time point, and accordingly, the "0" time-point.

The "0" Space-Time point is a point of Space-Time, Info-Energy and Mass-Energy transformations. Schrödinger equation for a particle, encountering a rectangular potential energy barrier, describes the conditions for a particle located at the centre of its Matrix, around the “0” time-point, the point of the Matrix symmetry.

In accordance with the Theory of Matrix, a free particle, which impinges on the barrier from one side, demonstrates Space-Time properties similar to the properties of other high energy radiating objects. This particle demonstrates the Space-Time imbalance, rotation about its Space-Time axis, and Gravity (or Antigravity in case of microscopic holes). The microscopic holes are not necessary “Black Holes”. Please see my book "Black Holes" for details.

A quantum is a discrete quantity of energy proportional in magnitude to the frequency of the radiation it represents. Any object, which is smaller than the wavelengths, supporting the info-energetic grid of its Matrix, does not exist in Space-Time.

Quantum energy as a discrete packet of energy can be absorbed, or transformed into the form of latent Info-Energy of the Matrix grid. This discrete packet of energy can be released, or transformed into the form of actual Info-Energy and represented in mass, different forms of kinetic energy and other energy representations, acting in the volume of the object/system in our dynamic world as a quantum, or a particle. Please see more of Planck for small scale effects associated with the centre of the Matrixes.

Changes of the frequency of electromagnetic waves and their wavelength influence the Matrix grid, changing Space-Time, Info-Energy and Mass-Energy properties of the particle via the energy transfer, changing the properties of the Matrix 2-dimensional rectangular info-energetic grid and the particle behaviour, including such qualities as rotation and Gravity. Dynamics preserve the Space-Time, Mass-Energy and Info-Energy

Conservation Laws and Matrix Laws of Symmetry.

We mentioned above that the transformations propagate with the speed of light and are carried by background radiation. The Coefficient of Transformation $[C]^2$ is applicable to the decisions associated with the Space-Time, Mass-Energy and Info-Energy transformations in micro-world.

The Theory of Matrix explains the appearance and disappearance of the particles and energy in Vacuum. No antimatter is involved. The particles and energy appear and disappear in Vacuum as a result of Space-Time, Info-Energy and Mass-Energy transformations.

Quantum Gravity

Particles and energy appear in our dynamic world as a result of the following:

* the particles and energy appear as a result of the Space-Time and Info-Energy imbalance and Space-Time, Mass-Energy and Info-Energy transformations - the transformation of Info-Energy associated with the 2-dimensional Space-Time (the latent, or potential, Info-Energy of the Matrix grid and actual Info-Energy of the Matrix Space of the Current Time, in some cases, being latent for us in the form of the SRM toroid and associated with the Space Potentiality) into the actual Info-Energy, represented in mass, different forms of kinetic energy and/or other energy representations, currently acting in our dynamic world as an appeared particle, energy, or a flash of light;

* Matrix forces provide the Space-Time, Mass-Energy and Info-Energy transformations;

* the 2-dimensional representations of background radiation, such as electromagnetic radiation, support the Matrix grid and 2-dimensional structure of the object/system; the dynamic representations of background radiation, such as electromagnetic radiation, provide the dynamic mechanism for the Space-Time and Info-Energy transformations; the Coefficient of Transformation $[C]^2$ is applicable to the decisions associated with the Space-Time, Mass-Energy and Info-Energy transformations;

* the process of the described Space-Time, Mass-Energy and Info-Energy transformations demonstrates qualities of Gravity, and gravitational acceleration must be detectable; the 2-dimensional info-energetic grid of the Matrix Space of the Current Time is the “gravitational horizon” in this process of transformations;

* the appeared particle and energy demonstrate qualities of rotation; the associated rotation of the 2-dimensional rectangular grid, or the rectangular potential energy barrier, supported by background radiation, must be detectable.

Quantum Antigravity

Particles and energy disappear from our dynamic world as a result of the following:

* the particles and energy disappear as a result of the Space-Time and Info-Energy imbalance and Space-Time, Mass-Energy and Info-Energy transformations - the transformation of the different forms of kinetic energy and mass, currently acting in our dynamic world as a particle or energy, into the latent Info-Energy associated with the 2-dimensional Space-Time (the latent, or potential, Info-Energy of the Matrix grid and actual Info-Energy of the Matrix Space of the Current Time, in some cases, being latent for us in the form of the SRM toroid and associated with the Space Potentiality) and ceasing the dynamic representations of the particle or energy;

* Matrix forces provide the Space-Time and Info-Energy transformations;

* the 2-dimensional representations of background radiation, such as electromagnetic radiation, build the Matrix grid and support the 2-dimensional structure of the object/system; the dynamic representations of background radiation, such as electromagnetic radiation, provide the dynamic mechanism for the Space-Time and Info-Energy transformations; the Coefficient of Transformation $[C]^2$ is applicable to the decisions associated with the Space-Time, Mass-Energy and Info-Energy transformations;

* the process of these Space-Time, Mass-Energy and Info-Energy transformations demonstrates qualities of Antigravity and anti-gravitational

deceleration that must be detectable; the 2-dimensional info-energetic grid of the Matrix Space of the Current Time is the “anti-gravitational horizon” in this process of transformations;

* the disappearing particle and energy demonstrate qualities of rotation; the associated rotation of the 2-dimensional rectangular grid, or the rectangular potential energy barrier, supported by the background electromagnetic radiation, must be detectable.

Dynamics preserve the Laws of Reversibility, Transformation, Limitation; Space-Time, Mass-Energy and Info-Energy Conservation Laws and Matrix Laws of Symmetry.

In both cases we can detect the reverse of the Space-Time and Info-Energy of the Matrix and, accordingly the reverse of the Space-Time, Info-Energy and Mass-Energy of the particle.

The great excessive actual Info-Energy of the Matrix can damage and destruct the Matrix grid forming the Space of the Current Time of the Matrix and radiation may be detected in the volume of the associated object/system and its surface. The jet of radiating energy may be released as a result of the destruction of the Matrix centre of the associated object/system. It is possible to avoid the destruction, building a system with two centres and using a direct Space-Time and Info-Energy transfer between the centres of two Matrixes - the particle, associated with the strong TRM and excessive actual energy around the “0” time-point, represented in mass, kinetic energy and other energy representations, and microscopic hole, associated with the SRM, by analogy with a binary system, such as the star and Black Hole.

Chapter 11 The Theory Of Light

The Theory of Matrix develops the theory of Light, uncovers unusual property of light and introduces the Speed of light as the coefficients [C] and $[C]^2$ applicable to the decisions associated with Space-Time, Info-Energy and Mass-Energy transformations, including those reflected in Gravity and Antigravity propagation.

“Relativity theory ... shares with the corpuscular theory of light the unusual property that light carries inertial mass from the emitting to the absorbing object.” [Einstein Albert, The Development of Our Views on the Composition and Essence of Radiation (1909)].

Albert Einstein has specified the relation between mass and energy of the object. “If an amount of energy E be given to a body, the inertial mass of the body increases by an amount E/c^2, where c is the velocity of light in vacuo. On the other hand, a body of mass m is to be regarded as a store of energy of magnitude mc^2.” [Einstein Albert, A Brief Outline of the Development of the Theory of Relativity (1921)].

Reading the famous equation for Mass-Energy equivalence $E= mc^2$ with respect to the 2-dimensional Space-Time helps to understand the Theory of Matrix. Space-Time, Mass-Energy and Info-Energy of the object/system are conserved in the object/system’s Matrix. Some amount of Time might be transformed into the proportional amount of Space, and some amount of Space may be transformed into the proportional amount of Time. The Space-Time transformation is a function of energy.

Space-Time Equivalence

Please consider the equation for Mass-Energy equivalence with respect to the 2-dimensional Space-Time understanding: energy $time^2= [C]^2$ mass $length^2$, or

E $time^2$ = $[C]^2$ m $length^2$ where the coefficient $[C]^2$ is equal to the squared numerical value of the speed of electromagnetic waves propagation in vacuum, E is energy, m is mass.

Energy is associated with 2-dimensional Time the same way as mass,

corrected with the squared numerical value of the speed of electromagnetic waves propagation in vacuum, is associated with 2-dimensional Space.

Rest mass and rest energy remain proportional to one another the same way as the 2-dimensional Space and 2-dimensional Time remain proportional to one another.

The universal proportionality exists between equivalent amounts of energy and mass, corrected with the squared numerical value of the speed of electromagnetic waves propagation in vacuum.

The universal proportionality exists between equivalent amounts of Time and Space, corrected with the squared numerical value of the speed of electromagnetic waves propagation in vacuum.

The universal proportionality factor between equivalent amounts of energy and mass is equal to the speed of light squared. The universal proportionality factor, taken as the squared numerical value of the speed of electromagnetic waves propagation in vacuum, is the coefficient for Space-Time, Mass-Energy and Info-Energy Transformations.

The volume of a system may change, although the total Space-Time of the system remain constant. The total mass of a system may change, although the total energy of the system remain constant. Space-Time and Info-Energy of the object/system are conserved in the object/system's Matrix.

The Law of Space-Time Conservation

The total Space-Time of the object/system is equal to the total Space-Time, which the existing object/system possesses for the total period of its existence, including its past, present and future. The total Space-Time of the object/system is conserved in its Matrix.

The system volume may change, although the total Space-Time of the system's Matrix remains constant; the system mass may change, although the total energy, the invariant mass, associated with Space-Time of the system's Matrix remains constant.

The Coefficient of Transformation $[C]^2$

The Coefficient of Transformation $[C]^2$ is equal to the squared numerical value of the speed of electromagnetic waves propagation in vacuum. It is the coefficient for Space-Time, Mass-Energy and Info-Energy Transformations.

It is applicable to any existing object and any system of the objects, including visually empty spaces, molecules and atoms, subatomic particles and holes, quanta, humans, planets and stars, Black Holes, the Universe, Multiverse, et cetera.

The coefficient [C] is equal to a numerical value of the speed of electromagnetic waves propagation in vacuum. It is a CODATA Fundamental Physical Constant: Value of Speed of light in vacuum (c) is 299 792 458 m s-1 (meter per second).

In accordance with the Committee on Data for Science and Technology (CODATA) Fundamental Physical Constants Velocity of light in vacuum is associated with the velocity of light measurements carried out by Michelson and his associates over the period 1924 to 1935. [NIST. Fundamental Physical Constants (2013)].

The Coefficient of Transformation $[C]^2$ is applicable to the decisions associated with the Space-Time, Mass-Energy and Info-Energy Transformations and, accordingly, the Gravity and Antigravity propagation.

Transformations

A large amount of Time is required in order to get a small amount of Space proportional to Time with the application of the Coefficient of Transformation $[C]^2$ if the Mass-Energy balance of the object is unchanged (energy/mass = $[C]^2$ $length^2/time^2$).

A small amount of Space is required in order to get a large amount of Time proportional to Space with the application of the Coefficient of Transformation $[C]^2$ if the Mass-Energy balance of the object is unchanged (energy/mass = $[C]^2$ $length^2/time^2$).

A large amount of Energy is required in order to get a small amount of Mass proportional to Energy with the application of the Coefficient of

Transformation $[C]^2$ if the Space-Time balance of the object is unchanged (energy/$[C]^2$ mass = length^2/time^2).

A small amount of Mass is required in order to get a large amount of Energy proportional to Mass with the application of the Coefficient of Transformation $[C]^2$ if the Space-Time balance of the object is unchanged (energy/$[C]^2$ mass = length^2/time^2).

A large amount of latent Info-Energy (LIE) is required in order to get a small amount of actual Info-Energy (AIE) proportional to LIE with the application of the Coefficient of Transformation $[C]^2$ if the Space-Time balance of the object is unchanged (LIE/$[C]^2$ AIE = length^2/time^2).

A small amount of actual Info-Energy is required in order to get a large amount of latent Info-Energy proportional to AIE with the application of the Coefficient of Transformation $[C]^2$ if the Space-Time balance of the object is unchanged (LIE/AIE $[C]^2$ = length^2/time^2).

Dynamics preserve the Laws of Reversibility, Limitation, Transformation, Symmetry; and Space-Time, Mass-Energy and Info-Energy Conservation Laws (please see Chapter 12 for details)

Background Radiation

Background radiation, including those currently known as cosmic background radiation, such as the cosmic microwave background radiation, electromagnetic radiation, light, et cetera, is the background structure of our dynamic world.

The 2-dimensional representations of background radiation build the external framework and boundary for the Universe and objects and systems, existing in the Universe, including single objects, systems of the objects, visually “empty” spaces, subatomic particles and holes, quanta, humans, planets and stars, Black Holes, et cetera.

Any object, which is smaller than the wavelengths, supporting the object's Matrix, does not exist in Space-Time.

The 2-dimensional representations of background radiation support the

Space-Time and Info-Energy structure of the Universe and every object and system existing in the Universe and contain their Space-Time, Mass-Energy and Info-Energy characteristics.

Energies of background radiation and associated information make Matrixes the STIE-blocks ("space-time-info-energy" building blocks) of the Universe.

In our dynamic world the Space-Time, Mass-Energy and Info-Energy transformations, including those associated with Gravity and Antigravity, propagate with the speed of light.

Dynamic representations of background radiation, being the internal framework and Space-Time and Info-Energy skeleton of the Universe and every object and system, existing in the Universe, provide a mechanism for Space-Time, Info-Energy and Mass-Energy transformations.

The frequency of the electromagnetic waves and their wavelength influence the Matrix grid, changing Space-Time properties via the energy transfer.

Dynamics preserve the Space-Time, Mass-Energy and Info-Energy Conservation Laws and Matrix Laws of Symmetry.

The study of background radiation and its Info-Energy characteristics in 2-dimensional Space-Time settings allows to gain additional knowledge in a wide spectrum of the natural sciences.

Anisotropies, or irregularities, of background radiation, such as the irregularities of the cosmic microwave background radiation, are associated with the two opposite forces, acting at the centre of the Matrix for the Universe and Matrixes for other existing objects and systems. These irregularities are related to the processes of the Space-Time, Info-Energy and Mass-Energy transformations.

In addition, the irregularities of background radiation are associated with the generation of new objects/systems and, accordingly, their Matrixes, incorporation and absorption of the Matrixes and associated objects, systems of the objects and visually empty spaces, existing in our dynamic world.

The Hawking radiation is a sign of the Matrix grid destruction around the

Matrix centre or in the area of the Matrixes' connection, if the "0" time-point centre was built, as a consequence of the great excessive Info-Energy between connected Matrixes. Please see my book "Black Holes" for details.

The Laws of Reversibility, Transformation, Limitation, Symmetry, and Space-Time, Mass-Energy and Info-Energy Conservation Laws (see Chapter 12) are applicable to the Universe and its Matrix. These principles are responsible for the harmony of the existing Universe and our complications related to the gravitational acceleration associated with the high energy massive radiating objects, such as our planet..

Chapter 12 The Main Principles

The main principles of the Theory of Matrix, applicable to every existing object and every system of the objects, are following:

Every existing object and every system with the characteristics of volume, mass, energy, and time of existence has its own Matrix of existence. The object/system is a source of its Matrix.

Energy pictures Space and Time

The 2-dimensional representations of background radiation, being the Matrix external framework for the Universe and objects and systems, existing in the Universe, is simultaneously the internal framework and Space-Time and Info-Energy skeleton of every existing object and system.

Energies of background radiation and associated information make Matrixes the STIE-blocks ("space-time-info-energy" building blocks) of the Universe.

Every existing object and every system are carrying the properties of different Space-Time modalities. The characteristics of the object/system are different in different modalities of Space-Time. Accordingly, the Matrixes for the objects and systems of the objects are multimodal structures.

The Matrix Laws of Symmetry

The Matrix Space-Time, Info-Energy and Mass-Energy are symmetrical via the "0" Space-Time point and via the Space-Time axis if the Matrix is balanced. The Matrixes for the objects and systems of the objects demonstrate a tendency to obtain and maintain the balance and symmetry via the "0" Space-Time point and via the Space-Time axis. A mirror effect is possible.

The Limitation Laws

The objects and systems of the objects limited in Space are limited in Time. The objects and systems of the objects limited in Time are limited in Space. The Matrixes for these objects and systems are limited in Space-Time.

The objects and systems of the objects of limited mass, energy and

information, associated with energy, are limited in Space and Time. The objects and systems limited in Space and Time are limited in mass, energy and associated information.

The Matrixes for the objects and systems of limited mass, energy and associated information are limited in Space-Time and Info-Energy.

The Laws of Space-Time, Info-Energy and Mass-Energy Conservation

1. The Law of Space-Time Conservation

The total Space-Time of the existing object/system is equal to the total Space-Time, which the object/system possesses for the total period of its existence, including its past, present and future.

The total Space-Time of the existing object/system is conserved in its Matrix.

The volume of a system may change, although the total Space-Time of the system remain constant.

2. The Law of Info-Energy Conservation

The total Info-Energy of the existing object/system is equal to the total Energy and associated Information, which the object/system possesses for the total period of its existence, including its past, present and future.

The total Info-Energy of the existing object/system is conserved in its Matrix.

The actual Info-Energy of a system may change, although the total Info-Energy of the system remain constant.

The Law of Info-Energy Conservation is a consequence of the Law of Mass-Energy Conservation.

3. The Law of Mass-Energy Conservation

The total Mass-Energy of the existing object/system is equal to the total Mass-Energy, which the object/system possesses for the total period of its existence, including its past, present and future.

The total Mass-Energy of the existing object/system is conserved in its

Matrix.

The total mass of a system may change, although the total energy of the system remain constant.

The Laws of Space-Time, Info-Energy and Mass-Energy Reversibility

1. The Matrix may be reversed. The Matrix reversibility is determined by the Space-Time, Mass-Energy and Info-Energy resources of the associated object.

2. The Matrix Space-Time may be reversed. The Matrix Arrows of Time may be reversed and, accordingly, the Matrix Space-Time may be reversed.

The Matrix Space-Time reversibility is determined by the Space-Time, Mass-Energy and Info-Energy resources of the associated object.

3. The Matrix Info-Energy may be reversed. The Matrix Info-Energy reversibility is determined by the Space-Time, Mass-Energy and Info-Energy resources of the associated object.

4. The Matrix Mass-Energy may be reversed. The Matrix Mass-Energy reversibility is determined by the Space-Time, Mass-Energy and Info-Energy resources of the associated object.

The Laws of Space-Time, Info-Energy and Mass-Energy Reversibility are preserved by the Laws of Limitation, Transformation, Matrix Laws of Symmetry and Space-Time, Info-Energy and Mass-Energy Conservation Laws.

The Laws of Space-Time, Info-Energy and Mass-Energy Transformations

1. The Law of Space-Time Transformations

Some amount of Time might be transformed into the proportional amount of Space, and some amount of Space may be transformed into the proportional amount of Time, maintaining the Space-Time, Info-Energy and Mass-Energy Conservation Laws and Matrix Laws of Symmetry. The Space-Time transformation is a function of energy.

2. The Law of Info-Energy Transformations

Some amount of actual Info-Energy (AIE) might be transformed into the proportional amount of latent, or potential, Info-Energy (LIE), and some amount of latent, or potential, Info-Energy may be transformed into the proportional amount of actual Info-Energy, maintaining Space-Time, Info-Energy and Mass-Energy Conservation Laws and Matrix Laws of Symmetry.

3. The Law of Mass-Energy Transformations

Some amount of mass might be transformed into the proportional amount of Energy and some amount of energy may be transformed into the proportional amount of mass, maintaining Space-Time, Info-Energy and Mass-Energy Conservation Laws and Matrix Laws of Symmetry.

4. The Coefficient of Transformation $[C]^2$ is applicable to the decisions associated with the Space-Time, Mass-Energy and Info-Energy Transformations.

The Coefficient of Transformation $[C]^2$ is equal squared numerical value of the speed of electromagnetic waves propagation in vacuum. A CODATA Fundamental Physical Constant [C] is the Value of Speed of light in vacuum (c) is 299 792 458 m s-1 (meter per second).

5. Dynamics preserve the Laws of Reversibility, Limitation, Matrix Laws of Symmetry, and Space-Time, Mass-Energy and Info-Energy Conservation Laws.

The Laws of Reversibility, Transformation, Limitation, Matrix Laws of Symmetry, and Space-Time, Mass-Energy and Info-Energy Conservation Laws are applicable to every SRM and every TRM. Every Matrix and every object/system demonstrates a tendency to obtain and maintain the balance and symmetry.

These principles are responsible for the harmony of the existing Universe and our complications concerning gravitational acceleration associated with the high energy massive radiating objects.

Equivalence Principle

The Theory of Matrix supports and develops the Equivalence principle, described in General Relativity, viewing the mentioned gravitational field as the Space-Time and Info-Energy imbalance.

High energy massive radiating objects and large spacious non-radiating objects demonstrate Space-Time, Mass-Energy and Info-Energy transformations to obtain and maintain the Space-Time and Info-Energy balance and symmetry.

The effects of Gravity, related to the Space-Time imbalance and associated Space-Time, Info-Energy and Mass-Energy transformations, have the same mechanism in an accelerated frame of reference and acceleration due to Gravity.

The effects of Antigravity, related to the Space-Time imbalance and associated Space-Time, Info-Energy and Mass-Energy transformations, have the same mechanism in a decelerated frame of reference and deceleration due to Antigravity.

Please see Chapter 8 for details associated with the Equivalence principle of the Theory of Matrix.

The Theory Of Light

The Theory of Matrix develops the theory of light, uncovers unusual property of light and introduces the Speed of light as the coefficients [C] and $[C]^2$ applicable to the decisions associated with Space-Time, Info-Energy and Mass-Energy transformations, including those reflected in Gravity and Antigravity propagation.

Space-Time equivalence

Please consider the equation for Mass-Energy equivalence with respect to the 2-dimensional Space-Time understanding:

energy $\text{time}^2 = [C]^2$ mass length^2 where the coefficient $[C]^2$ is equal to the squared numerical value of the speed of electromagnetic waves propagation in vacuum.

Energy is associated with 2-dimensional Time the same way as mass, corrected with the squared numerical value of the speed of electromagnetic waves propagation in vacuum, is associated with 2-dimensional Space.

Rest mass and rest energy remain proportional to one another the same way as the 2-dimensional Space and 2-dimensional Time remain proportional to one another.

The universal proportionality exists between equivalent amounts of Time and Space, corrected with the squared numerical value of the speed of electromagnetic waves propagation in vacuum. The universal proportionality factor, taken as the squared numerical value of the speed of electromagnetic waves propagation in vacuum, is the coefficient for Space-Time, Mass-Energy and Info-Energy Transformations.

The volume of a system may change, although the total Space-Time of the system remain constant. The total mass of a system may change, although the total energy of the system remain constant. Space-Time and Info-Energy of the object/system are conserved in the object/system's Matrix.

The Coefficient of Transformation $[C]^2$

The Coefficient of Transformation $[C]^2$ is equal to the squared numerical value of the speed of electromagnetic waves propagation in vacuum. It is the coefficient for Space-Time, Mass-Energy and Info-Energy Transformations. The coefficient [C] is equal to a numerical value of the speed of electromagnetic waves propagation in vacuum. It is a CODATA Fundamental Physical Constant: Value of Speed of light in vacuum (c) is 299 792 458 m s-1 (meter per second). The Coefficient of Transformation $[C]^2$ is applicable to the decisions associated with the Space-Time, Mass-Energy and Info-Energy Transformations and, accordingly, the Gravity and Antigravity propagation.

Transformations

In our dynamic world the Space-Time, Mass-Energy and Info-Energy transformations, including those associated with Gravity and Antigravity, propagate with the speed of light. Background radiation, supporting the

Space-Time and Info-Energy structure of the Universe and objects and systems, existing in the Universe, and being dynamic in our dynamic world, conduct Space-Time, Info-Energy and Mass-Energy transformations, including those associated with Gravity and Antigravity. Dynamics preserve the Space-Time, Mass-Energy and Info-Energy Conservation Laws and Matrix Laws of Symmetry.

Equilibrium

Equilibrium of the Matrix is reached if the Matrix is balanced in its energy, associated information and Space-Time. Internal equilibrium of the Matrix occurs when the Matrix resultant force is zero. In case of the contact equilibrium between Matrixes Space-Time, Info-Energy and Mass-Energy are transferred through the contact paths and the relation of the equilibrium is transitive, reflexive, and symmetrical. The contact equilibrium is reached if the system is balanced.

Internal thermal equilibrium of a Matrix is reached if the Matrix is balanced that means that no heat enters or leaves it, it is balanced under its own intrinsic characteristics, symmetrical, and its temperature is spatially and temporally uniform. In case of the contact thermal equilibrium between Matrixes heat is transferred through the contact paths and the relation of thermal equilibrium is transitive, reflexive, and symmetrical. The contact equilibrium is reached if the system is balanced.

Chapter 13 Prospects

The Theory of Matrix is applicable to every object and every system of the objects, including visually “empty” spaces, subatomic particles and holes, quanta, humans, Black Holes, other objects and systems existing in the Universe.

The Theory of Matrix is applicable to the Universe and its Matrix.

The application of the Theory of Matrix provides an opportunity to access some additional Space-Time characteristics and properties of the multimodal objects and different regions of our Universe, their Space-Time, Mass-Energy and Info-Energy structures; Space-Time, Mass-Energy and Info-Energy transformations, characteristics of Gravity, Antigravity and specific rotation of cosmic background radiation.

Energies of background radiation, including those known as electromagnetic radiation, cosmic background radiation, such as the cosmic microwave background radiation, light, et cetera, and associated information, supporting the info-energetic grid of the multimodal Matrixes, make Matrixes the STIE-blocks of the Universe.

The dynamic representations of background radiation are accessible for our investigation.

The study of background radiation and its energy characteristics in the 2-dimensional Space-Time settings will allow to gain the additional knowledge, associated with the structure of the Universe and objects existing in the Universe, and provide an exceptionally wide spectrum of opportunities for broad range of the natural sciences.

“I'm of the opinion, that physics is conceptual, not illustrative.” (Albert Einstein, The Bad Nauheim Debate (1920)

Conceptual physics (plural noun, treated as sing.) is the study and description of properties and interactions of space, time, matter, and energy in conceptual non-mathematical form with emphasis on logical reasoning in order to derive fundamental laws of nature and obtain conclusions from these laws by a sequence of logical steps. It is a branch of theoretical physics.

The human perception of Time is the main boundary we operate in. The human momentary perception of Time is reflected in the mathematics and other abstract sciences associated with numbers, quantities and space. It is reflected in the abstract concepts, which are built on mathematics and applied to other disciplines, such as physics.

Mathematics based on single numbers, where 1^3 still equals 1, will not help to overcome the barrier of pointed consciousness. Development of 3-dimensional mathematics is necessary.

The Theory of Matrix supports the next step of the Space-Time Theory development with respect to the 3-dimensional Time, its practical application to the 3-dimensional Space and following merger into the new quality of 3-dimensional Space-Time understanding.

Chapter 14 Content Use Policy

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Afterword

The Theory of Matrix is a new theory combining the elements of cosmology and astrophysics. This theory was introduced by Dr Audrey E. Randles in her work “The Theory of Matrix” in 2012.

Dr Randles developed the program for psychological investigations of the Universal Matrix along with the development of the Coresynthesis Psychological Model in early 1990s. There was a space of ten years between the first explanations of the results and association of these results with the characteristics mathematically introduced by Lorenz, Minkowski, and Einstein for the Light Cone.

When Dr Randles published her work the Light Cone was considered a specific case applicable to the flash of light. She brought forward the idea of the universality of the Space-Time structure of the objects and new vision on Space-Time physics.

Following the analysis of the parallels and variations between the Universal Matrix and Light Cone Dr Randles calls the Light Cone “the Matrix of Light” and presents the Theory of Matrix as the relative importance for true understanding of the multimodal world.

The Theory of Matrix introduces the new understanding of multidimensional world with respect to multidimensional time. Time is no longer seen as another dimension of space, nor as a momentary feature of an event but as a multidimensional element in its own right. Dr Randles associated Space with the Actuality and Time with the Potentiality, or Latency. Therefore, the objects are viewed as multimodal multidimensional objects in Space-Time.

The Theory of Matrix series of books by Audrey E. Randles:

“Blocks of the Universe”

“Space and Time”

“Energy of Existence”

“Gravity and Rotation”

“Black Holes”

“Matrix of the Universe”

Please visit our website http://www.coresynthesis.org.uk